

## **Functional Outcomes in Spinal Tuberculosis: A Review of the Literature**

### **ABSTRACT**

Spinal tuberculosis often leads to neurological deficit and subsequent deterioration in functional outcomes. This review assesses the recent evidence on functional outcomes in spinal tuberculosis, highlighting functional recovery, assessment tools for functional measures, and associative factors for functional recovery. Using PubMed, a literature search was done using the terms "spinal tuberculosis," "tuberculous spondylitis," "tuberculous spondylodiscitis," and "functional outcome" for original articles published between January 2010 and December 2019. A total of 191 search results were found. Detailed screening showed that 19 articles met the eligibility criteria: 13 of these focused on surgical methods, four on conservative management, and two on rehabilitation approaches. The outcome measures used for functional assessment were the Oswestry Disability Index (11 articles), Japanese Orthopaedic Association score (n=3), modified Barthel Index (n=2), Functional Independence Measure (n=2), and 36-item Short-Form Health Survey (n=1). Functional outcome was mainly affected by pain, spinal cord compression, and inpatient rehabilitation. No significant difference in functional outcome was found between conservative management and surgery for cases with uncomplicated spinal tuberculosis. Most studies focused on surgery as the mode of treatment and used pain-related functional measures; however, these assessed functional limitations secondary to pain, and not neurological deficits. Further studies may consider examining functional outcomes in spinal tuberculosis by utilizing spinal cord-specific functional outcome measures, to evaluate outcome measures as a prognostic tool, and to measure functional outcomes from specific rehabilitation interventions.